IBM® WebSphere® Everyplace® Deployment Version 6

Overview

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This presentation introduces IBM WebSphere Everyplace Deployment Version 6.

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Goals

- Understand IBM WebSphere Everyplace Deployment Version 6, which includes the following:
  - ▶ IBM WebSphere Everyplace Deployment for Windows and Linux Version 6 client platform
  - ▶ IBM WebSphere Everyplace Client Toolkit Version 6
  - ▶ IBM WebSphere Everyplace Deployment Version 6 server platform

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IBM WebSphere Everyplace Deployment 6.0 Overview   © 2005 IBM Corporation

The goal of this presentation is to understand IBM WebSphere Everyplace Deployment Version 6, which includes the IBM WebSphere Everyplace Deployment for Windows and Linux Version 6 client platform, the IBM WebSphere Everyplace Client Toolkit Version 6, and the IBM WebSphere Everyplace Deployment Version 6 server platform.

Agenda

- Overview of IBM WebSphere Everyplace Deployment Version 6

- IBM WebSphere Everyplace Deployment for Windows and Linux Version 6 client platform

- IBM WebSphere Everyplace Client Toolkit Version 6

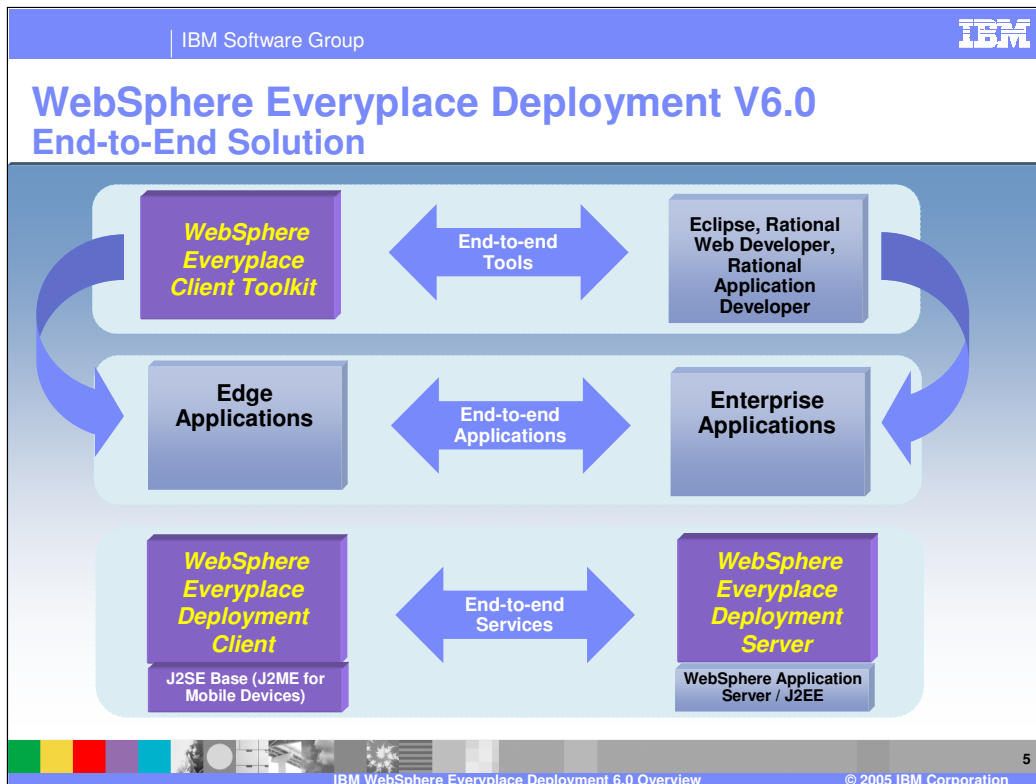- IBM WebSphere Everyplace Deployment Version 6 server platform

The agenda of this presentation is to provide an overview of the end-to-end solution provided by IBM WebSphere Everyplace Deployment Version 6, to provide an overview of the IBM WebSphere Everyplace Deployment for Windows and Linux Version 6 client platform, to provide an overview of the IBM WebSphere Everyplace Client Toolkit Version 6 , and to provide and overview of the IBM WebSphere Everyplace Deployment Version 6 server platform.

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IBM WebSphere Everyplace Deployment Version 6 Overview

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Let's start with an overview of end-to-end solution provided by IBM WebSphere Everyplace Deployment Version 6.

WebSphere Everyplace Deployment V6.0
End-to-End Solution

WebSphere Everyplace Client Toolkit	End-to-end Tools	Eclipse, Rational Web Developer, Rational Application Developer
Edge Applications	End-to-end Applications	Enterprise Applications
WebSphere Everyplace Deployment Client **J2SE Base (J2ME for Mobile Devices)**	End-to-end Services	*WebSphere Everyplace Deployment Server* **WebSphere Application Server / J2EE**

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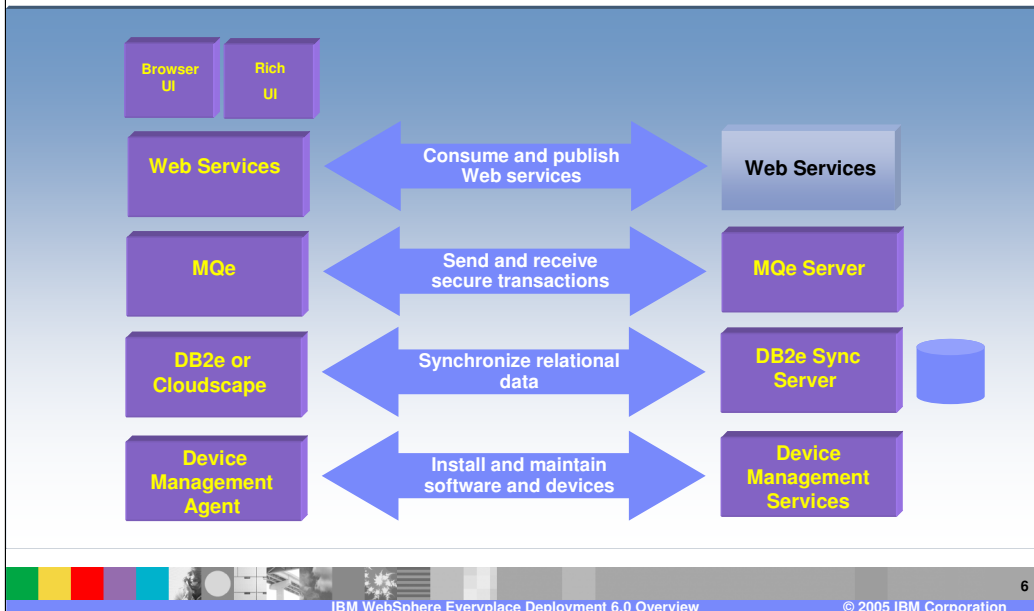
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The combination of the IBM WebSphere Everyplace Deployment for Windows and Linux Version 6 client and the IBM WebSphere Everyplace Deployment Version 6 server provide the end-to-end services necessary to deliver and manage end-to-end applications. Administrators use the IBM WebSphere Everyplace Deployment Version 6 server to install and configure the services necessary for client applications to securely perform assured transactions and database synchronization with Enterprise applications and data. Client applications can also utilize Web Services so end-users have access to a broad range of business data and consumer information. Furthermore, the server provides an Enterprise-caliber management solution so a systems administrator can manage client applications and resources.

The WebSphere® Everyplace® Client Toolkit provides a complete, integrated set of tools that allows you to develop, debug, test, package and deploy client applications. This toolkit is built on Eclipse technology and extends the powerful Rational® suite of development tools so you can leverage your existing skills and software components to develop end-to-end applications.

The worldwide GA for IBM WebSphere Everyplace Deployment Version 6 is October 14, 2005. All components shown in purple are available in this release.

WebSphere Everyplace Deployment V6.0
End-to-End Programming Model

Browser UI

Rich UI

Web Services → Consume and publish Web services → Web Services

MQe → Send and receive secure transactions → MQe Server

DB2e or Cloudscape → Synchronize relational data → DB2e Sync Server

Device Management Agent → Install and maintain software and devices → Device Management Services

IBM WebSphere Everyplace Deployment 6.0 Overview   © 2005 IBM Corporation

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In this picture you can see the complete set of end-to-end services supported between client and server applications. The IBM WebSphere Everyplace Deployment server installs the WebSphere MQe Server, DB2e Sync Server, and the Tivoli Device Management Server. Web Services are supported on the server through WebSphere Application Server, which is a prerequisite to the WebSphere Everyplace Deployment server. These services support an end-to-end programming model that enables client applications to securely access Enterprise applications, services and data.

All components shown in purple are available in this release.

An additional capability which some of our customers have chosen to implement is the WebSphere Everyplace Connection Manager (WECM). WECM enables client applications to operate over secure, roaming network connections on wireless and wireline networks. WECM installs below TCP/IP API's so TCP/IP applications can continue to run without change and benefit from these capabilities.

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IBM WebSphere Everyplace Deployment for Windows and Linux Version 6 Client

Next, here is an overview of the IBM WebSphere Everyplace Deployment for Windows and Linux Version 6 client platform.

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IBM WebSphere Everyplace Deployment for Windows and Linux Version 6 Client

- Integrated client platform for desktops and laptops that complements WebSphere and provides a disconnectable, rich client platform for Enterprise applications

- Target customers are ISV's, Enterprise application developers, and OEM's

- Available both as a LPP and via OEM agreements
  - MSRP = $69 per client

- Supports Group 1 and Group 2 languages

- Follow-on release to WCTME-EO 5.8.1 LPP (GA 12/2004)
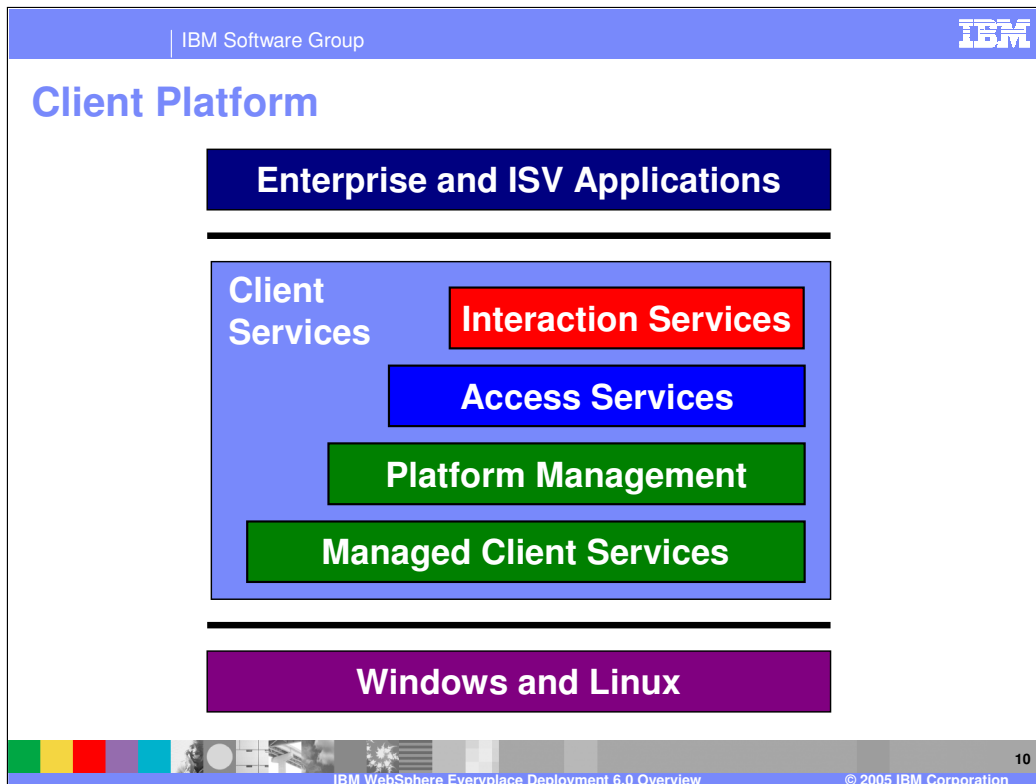 - WCTME-EO 5.8.1 applications will run on IBM WebSphere Everyplace Deployment for Windows & Linux Version 6

IBM WebSphere Everyplace Deployment for Windows and Linux Version 6 is an integrated client platform for desktops and laptops that complements WebSphere by extending the J2EE / WebSphere programming model to clients. The client provides a disconnectable, rich client platform so Enterprise applications can run on clients, and operate when the client is online and offline. Target customers are ISV's, Enterprise application developers, and OEMs. The client platform is available both as a Licensed Program Product (LPP) for $69 per client and also through OEM agreements for customized client platforms. The client platform supports Group 1 and 2 languages. The client platform is the follow-on release to Workplace Client Technology, Micro Edition – Enterprise Offering (WCTME-EO) 5.8.1, which was released in December 2004. Applications that run on WCTME-EO 5.8.1 will run on IBM WebSphere Everyplace Deployment for Windows and Linux Version 6.

IBM WebSphere Everyplace Deployment for Windows and Linux Version 6 Client

- Windows IA32 and Linux IA32 environments
  - ‣ Microsoft ® Windows XP Service Pack 1
  - ‣ Microsoft ® Windows XP Service Pack 2
  - ‣ RedHat ® EL 3.0 WS with GTK support – Update 3
  - ‣ Microsoft ® Windows 2000 Professional <u>not</u> supported

- Minimum hardware configuration
  - ‣ 256MB RAM (for LPP)
  - ‣ 150 MB free disk space (for LPP)
  - ‣ x86 processors capable of supporting Windows XP
  - ‣ RAM and disk space might be reduced for custom OEM platforms

- Includes IBM J2SE 1.4.2 SR2 JVM
  - ‣ No other JVM's are supported

You must ensure that each machine on which you plan to install the IBM WebSphere Everyplace Deployment for Windows and Linux Version 6 client meets the requirements shown on this slide. Also, the IBM J2SE 1.4.2 JVM (SR2) is the only JVM supported by the client platform.

Client Platform

Enterprise and ISV Applications

Client Services

Interaction Services

Access Services

Platform Management

Managed Client Services

Windows and Linux

Now, let's look at the services that comprise the client platform.

The client platform provides a set of standards-based *Client Services* on which you can build your applications. These Client Services include:

•**Managed Client Services** to enable multiple applications and services to run on the same JVM, support life cycle management of these applications and services, and provide application portability across Windows and Linux operating systems.

•**Platform Management** to install, maintain, and configure the applications and services on the client.

•**Access Services**, which provide middleware so your client applications can securely access e-business applications, services and data and continue to operate even when a device is offline.

•**Interaction Services**, which support interaction with end-users through a traditional Web browser and a rich graphical user interface through Eclipse technology.

IBM WebSphere Everyplace Deployment for Windows and Linux Version 6 - New Features

- Built on Eclipse 3.0.2 RCP
- WAS-based Web container
  - JSP 2.0 and Servlet 2.4
  - SSL-enabled
  - JSF and JSTL 1.1 libraries
- Embedded Transaction container (ETC) for business logic
- Cloudscape RDB
- JNDI
- MQTT/MicroBroker (Tech Preview)
- Web Services (WS) (update)
  - Custom serializer / deserializer
  - XML-based WS-Security
  - WS-Security & SSL-enablement for WS provider
- ICU4J (Globalization)

- Application launcher / switcher
- User interface branding
- Enhanced browser support
- Enterprise Management Agent (update)
  - SSL-enabled agent connection to server
  - Native platform management via agent extensions
- Logging improvements (update)
- IBM Support Assistant
- Additional OSGi service implementations
- 1-click deployment of client runtime to desktop (Tech Preview)

The new features for the IBM WebSphere Everyplace Deployment for Windows and Linux Version 6 client platform are listed on this slide. We will explain each of these new features in more detail during the course of this education.

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IBM WebSphere Everyplace Client Toolkit Version 6

Next, we provide an overview of the IBM WebSphere Everyplace Client Toolkit Version 6.

IBM WebSphere Everyplace Client Toolkit Version 6
Re-engineered to extend familiar Eclipse and Rational tools

- Toolkit update for Rational Software Development Platform
  - Installs as a <u>single</u> Eclipse Feature into RSDP for easier installation
    - Installs into Rational Web Developer, Rational Application Developer, or Rational Software Architect 6.0.1
    - WebSphere Studio Device Developer no longer required!
  - Complements Eclipse Visual Editor for Java to create rich client applications (SWT)
  - Works with Rational Web tools to deploy Web applications to client
  - Works with Rational EJB tools to deploy Embedded Transaction applications (EJB 2.0 subset) to client
  - Enables client applications to securely consume and provide Web Services
  - Supports development of messaging and database applications
  - Enables building of custom client platforms
  - Supports scripting via Ant Tasks and command line tools

The IBM WebSphere Everyplace Client Toolkit Version 6 provides a complete, integrated set of tools that allows you to develop, debug, test, package and deploy client applications. The toolkit installs as an Eclipse Feature into the Rational Software Development Platform so you can use your existing IDE to develop a variety of client applications. The Visual Editor for Java complements the toolkit to build rich client applications with SWT. The toolkit works with Rational Web tools to deploy Web applications to the client platform. The Toolkit also works with the Rational EJB tools to deploy Embedded Transaction Applications to the client. The toolkit supports development of applications that consume and/or provide Web Services. The toolkit also provides a platform builder tool that enables you to build custom client platforms. The toolkit supports scripting via Ant Tasks and also provides command line tools.

IBM WebSphere Everyplace Client Toolkit Version 6 - New Features

- Built on Eclipse 3.0.2 IDE / PDE
  - Re-engineered to extend Eclipse tooling
  - Directly targets runtime
  - Eclipse-style local launch
  - Eclipse 3.0.2 + OSGi R3 prereq checks
- Rational tools prerequisite
  - RWD, RAD or RSA
  - WSDD no longer a prerequisite
- Simplified tools installation (single installable feature)
- Web Services (update)
  - Wizard for WS-Security
  - Wizard to provide Web Service

- Web tools (update)
- Support new Web container
- Embedded Transaction container tools
- Platform builder
- Platform profiles
- Samples
  - Showcase (Order Entry, Mobile Adjuster, and Open Financial Network Teller end-to-end applications)
  - Application (OSGi, Web Services, ETC, etc.)
  - Technology (OSGi, DB2e, MQe, etc.)

The new features for the IBM WebSphere Everyplace Client Toolkit Version 6 are listed on this slide. We will explain each of these new features in more detail during the course of this education.

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IBM WebSphere Everyplace Deployment Version 6 Server

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IBM WebSphere Everyplace Deployment 6.0 Overview   © 2005 IBM Corporation

Finally, we provide an overview of the IBM WebSphere Everyplace Deployment Version 6 server platform.

IBM WebSphere Everyplace Deployment Version 6 Server – New!

- Integrated install and configuration of server components
  - DB2 Everyplace Synchronization Server, Enterprise Edition, Version 8.2.1
  - Device Management Server 1.8
  - WebSphere MQ Everyplace for Multiplatform Version 2.0.1.8
- Common User registry for DB2 Everyplace and Device Manager
- A User Management Console that allows you to create users and groups when DB2 is configured as the user repository.
- Configuration Wizard
  - Reconfigures the User Management subsystem to use an enterprise Active Directory 2003 as the user repository instead of DB2.
  - Change the administrator passwords in the WED components.
- First Steps Menu
- InfoCenter available at
  http://publib.boulder.ibm.com/infocenter/iwedhelp/v6r0/index.jsp

IBM WebSphere Everyplace Deployment Version 6 is a <u>new</u> server delivery platform that provides an integrated installation and configuration of the server middleware components that provide access services for server-managed clients. These middleware components are DB2 Everyplace, Device Manager, and WebSphere MQ Everyplace. The installation and configuration programs are driven from a graphical user interface (GUI).

Each server-managed client must have a unique user ID and password to log in to Device Manager and DB2 Everyplace. Everyplace Deployment reduces the overhead of creating and managing user IDs by providing a **common user registry** shared by Device Manager and DB2 Everyplace. WebSphere Application Server is configured to use this common user registry for all WebSphere applications installed on the local machine. Because there is a common user registry, client users need only a single user ID to access both DB2 Everyplace and Device Manager. Everyplace Deployment creates a local database for the common user registry during the installation that is intended for use in a development environment. When you are ready to upgrade to a pilot or production environment, you can change the server configuration to use **Active Directory 2003** as the common user registry.

The **User Management console** provides an easy to use web-based interface to the local database user registry. The console functions provide the minimal function required to develop and test DB2 Everyplace and Device Manager applications. You can use the console to create users and groups and manage group memberships for your test users. The User Management console is secured and accessible only by a Everyplace Deployment administrative user ID.

The **Configuration Wizard** enables you to update the server configuration after the initial installation and configuration. You can use the Configuration Wizard to complete the following tasks:

•Change the database administrator's password in the server configuration.

•Change the Everyplace Deployment administrator's password in the server configuration.

•Change the server configuration to use Active Directory 2003 as the user registry.

The **First Steps** menu provides a convenient starting point for verifying the installation, starting and stopping the servers, and accessing the User Management console. You can launch First Steps after the installation is complete or from the Windows® Start Menu.

The InfoCenter provides complete information on the server.

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IBM WebSphere Everyplace Deployment Version 6 Server – Client Support

- **WIN32/LINUX Desktop supported clients :**
  - ▸ IBM WebSphere Everyplace Deployment for Windows and Linux Version 6
  - ▸ Workplace Client Technology Micro Edition - Enterprise Offering 5.8.1

- **Palm, WM2003 2nd Edition :**
  - ▸ Workplace Client Technology Micro Edition 5.7.1
  - ▸ Workplace Client Technology Micro Edition 5.7.2 FP1

- **Devices Supported :**
  - ▸ Palm
    - ▪ Tungsten C (MIDP only)
  - ▸ WM2003 Second Edition Devices are:
    - ▪ HP iPaq 5550, 4700, 3715 , HTC Dopod 700, Fujitsu Siemens Pocketloox 720(SE), Qtek 9090, Toshiba Genio e830(VGA

IBM WebSphere Deployment Version 6 server supports the following clients:

•IBM WebSphere Everyplace Deployment for Windows® and Linux® Version 6.0

•IBM Workplace Client Technology, Micro Edition Enterprise Offering (WCTME EO) 5.8.1

•IBM Workplace Client Technology, Micro Edition (WCTME) 5.7.2 for devices:
   •Windows® Mobile 2003 2nd Edition with HP iPaQ Pocket PC h5550
   •Windows® Mobile 2003 2nd Edition with HP iPaQ Pocket PC h4700
   •Windows® Mobile 2003 2nd Edition with HP iPaQ Pocket PC h3715

•IBM Workplace Client Technology, Micro Edition (WCTME) 5.7.1 for devices:
   •Windows® Mobile 2003 with HP iPaQ Pocket PC h5550
   •Palm with the palmOne Tungsten C

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IBM WebSphere Everyplace Deployment Version 6 Server - Minimum Hardware Requirements

- **Processor:** Windows®: Pentium 4 processor at 2 GHz or higher is the minimum recommended processor

- **Physical memory** 2 GB at a minimum

- **Disk space** 4 GB minimum

- **Network connectivity** Network adapter and connection to a physical IP network e.g. Ethernet
  - ▶ Static IP address configured with a fully-qualified host name

- **Other hardware**
  - ▶ CD-ROM or access to a network drive where the Everyplace Deployment CD contents reside
  - ▶ Mouse or pointing device and keyboard

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This slide shows the minimum hardware requirements for the IBM WebSphere Everyplace Deployment Version 6 server.

IBM WebSphere Everyplace Deployment Version 6 Server – Software Prerequisites

- Operating Systems
  - Windows® 2003 Standard (32-bit version only)
  - Windows® 2003 Enterprise (32-bit version only)
  - Windows® 2003 Standard (32-bit version only) with Service Pack 1
  - Windows® 2003 Enterprise (32-bit version only) with Service Pack 1

- Database Server
  - DB2 Universal Database Enterprise Edition Version 8.2.2 with Fix Pack 9 or Fix Pack 9a
  - DB2 Universal Database Workgroup Server Unlimited Edition 8.2.2 with Fix Pack 9 or Fix Pack 9a
  - DB2 Universal Database Workgroup Server Edition with a five user minimum 8.2.2 with Fix Pack 9 or Fix Pack 9a

- Web Application Server
  - WebSphere Application Server Version 6.0.2 with APAR PK10400

- Web Server
  - IBM HTTP Server Version 6.0.2 (Shipped with WAS)

This slide shows the software prerequisites for the server. IBM WebSphere Everyplace Deployment server has been tested with these versions of the software. Other versions are not supported by the server.

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